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Practical Way Of Enhancing Adobe/Smartforms Form Output



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Active Contributor

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Hi,

In this post, I would like to share with you, how we can enhance a standard adobe or smart forms' output by applying MVC.

As business requirements may differ from SAP standard form format, we may require to enhance an existing form. What usually happens is, functional consultant tells the name of output program and form and developer copies both to Z versions. And worst, all enhancement code is written under code block of form and many new fields are added to global data of interface.

Actually **you do not need to copy the program**. Why? Because, all the inputs, those exists on program, are already given to form as import parameters. Therefore, simply copy only the form, create a class and process required data from import parameters within that model class, to create a single deep structure for output, which is to be used in form.

How I do that is, I create a class and call that class in code block of form's code interface. And as return parameter, I create a deep structure to be used in form context.

Here is an example. In this example adobe form is copied from standard form, and interface is copied as well. In interface code block, model object is called and get_data method fills global docstc deep structure. The docstc structure contains all required extra data. Instead of using many fields, use single deep structure. In that way if you need to add a new field, that can be achieved simply by adding it to structure. Instead of editing interface and form's related blocks.

Form

Form Builder: Display Form ZSD_AF_RVDELNOTE

Form ZSD_AF_RVDELNOTE Active

PropertiesContextLayout

Interface

ZSD_IF_RVDELNOTE

Import

Global Data

System Fields

Context

ZSD_AF_RVDELNOTE

ADDRESS

INFORMATION

SHIPMENT_DETAILS

ITEM_DETAILS

FOOTER

ADDRESS1

FOLDER

FOOTER_TEXT

SHIP_TYPE_TEXT

SHIP_INST_TEXT

DOCSTC

VBELN

SHIP_TYPE_TEXT_NAME

SHIP_TYPE_TEXT_LANGU

SHIP_TYPE_TEXT

DELIVERIES

FOOTER_TEXT_NAME

FOOTER_TEXT_LANGU

FOOTER_TEXT

LANGU

VSTEL

VSART

ADDRNUM

OUTTAB

SHIP_INST_TEXT

SHIP_INST_TEXT_LANGU

I...

S...

Description

Address

Delivery Note Information

Shipment Details

Item Details

Footer Details

Address on the 2nd master page

FOLDER

Text Node TEXT

Text Node TEXT

Text Node TEXT

Adobe Form Structure

Sales and Distribution Document Number

Name

Language Key

Smart Forms: Text

ZSD_S_IF_RVDELNOTE_DEL

Name

Language Key

Smart Forms: Text

Language Key

Shipping Point / Receiving Point

Insurance type

Address Number

List for Adobe Form Output

Smart Forms: Text

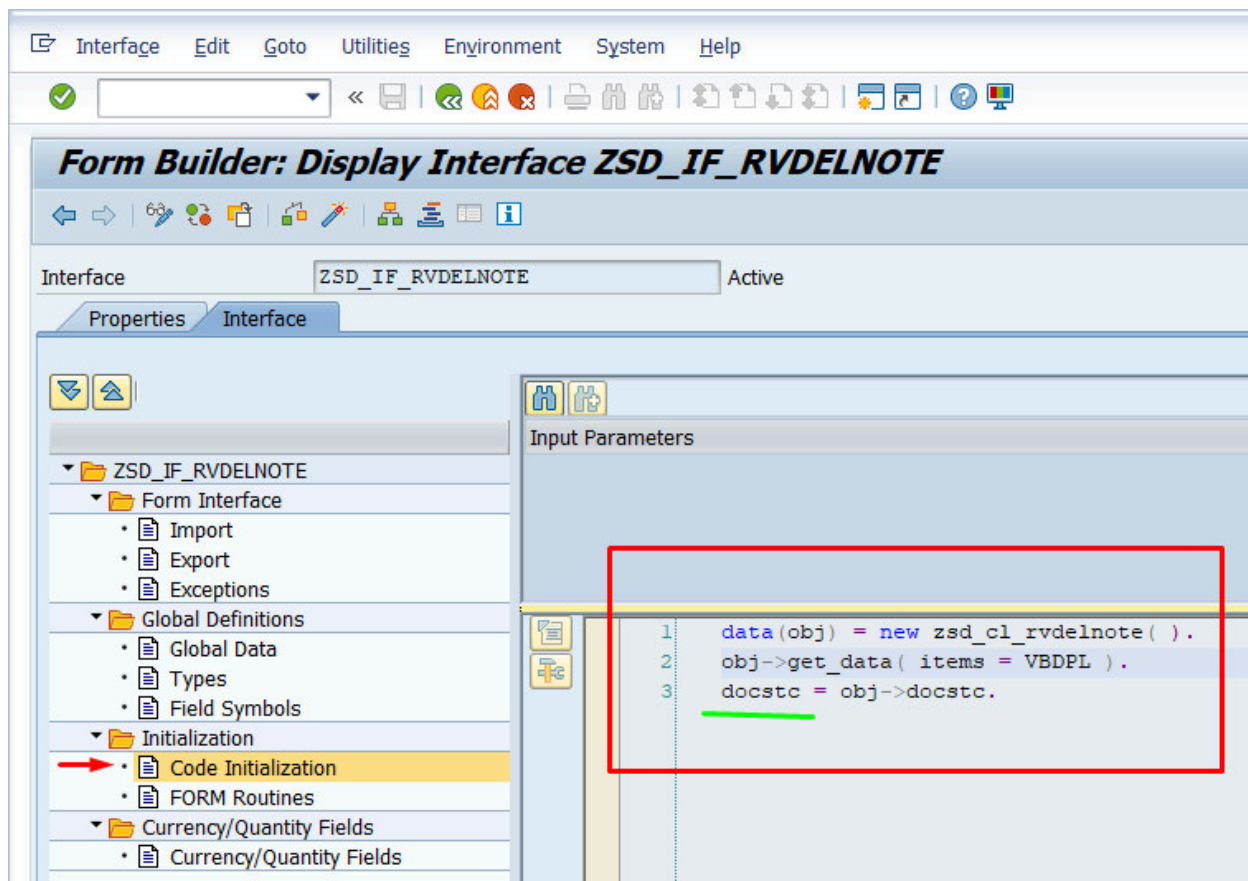
Language Key

One deep structure to contain all enhanced / required data

Property

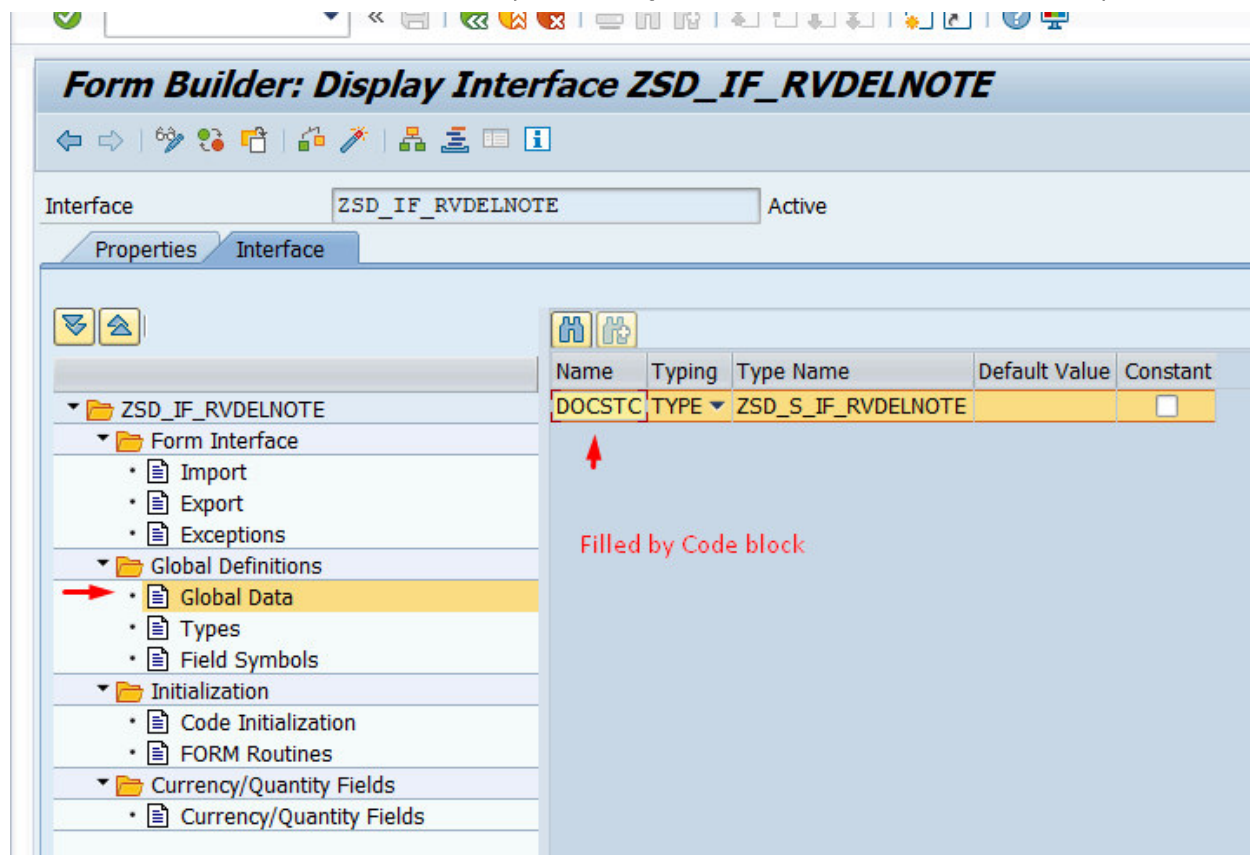
Value

Interface Code Block



Form Code Interface

Interface Global Data - this data is passed to form context.



Simple as that, all the complexity is encapsulated in class. And If a new format of the form is required, same class can be used.

Writing code directly under forms code block is a bad practice, it is against mvc, against code reusability and makes developers life definitely more difficult. Simply, using code block just as a controller to pass import parameters to model class and retrieving return data is easier and better practice. Makes code reusable, testable and also modular.

Hope that helps to you.

To have more idea about applying MVC, you can have a look at [Applying MVC in ABAP blog post](#).

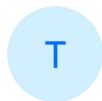
Thanks for reading.

Tags:

mvc

mvc architecture

Comments



tamasbeckerfujitsu Explorer

2022 Dec 30

9:09 AM

If you have huge differences in the forms then you might still want to use different structures. Not just the output, but the input might be also very different. I personally like to see if my code filled up every field that i need without being disturbed by the unnecessary fields of other forms.

Once the structure is not the same, I also cant create a general `get_data` method because each method needs different structure in the interface.



beyhan_meyrali Active Contributor

2023 Jan 02

1:41 PM

Tamas, What I am trying to tell in blog is, do not write code directly under code block. Instead apply MVC, use code block as controller to pass and receive parameters. And instead of passing each parameter one by one, place them in a structure, so you won't need to change controller code with field changes.

That is all.